NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE SPECIFICATION

DIVERSION

(feet)
CODE 362

SCOPE

The work shall consist of excavation and placement of earth materials for the construction of a diversion to the lines, grades, elevation, and cross-sections as shown on the drawings or as staked in the field.

SITE PREPARATION

The foundation area shall be cleared of all trees, stumps, roots, brush, boulders, sod, debris, and other objectionable material. All topsoil shall be removed and stockpiled until needed for spreading over areas requiring vegetative cover. Small gullies, ditches or depressions within the foundation area shall be filled and compacted after the area has been cleared.

EXCAVATION

The channel shall be excavated to the lines and grades shown on the drawings and/or as staked in the field. Excavated materials shall be used in the earth embankment or wasted to selected locations. Fill material shall be obtained at locations specified or as shown on the drawings.

EARTHFILL

Material All suitable fill material obtained from the excavated channel will be used to construct the embankment. Fill material containing brush, roots or other perishable or unsuitable material shall not be used. Cobbles and rock fragments having a maximum dimension of more than six inches will be removed from the material. Gravel, and sand will not be used to construct the fill unless mixed with clay material approved by the Engineer.

Soil Moisture The moisture content of the soil shall be sufficient that the material will maintain a firm ball shape when squeezed in the hand.

Placement The diversion shall be constructed by placing earthfill in lifts not exceeding 6 inches before compaction. The surface of the finished diversion shall be graded and smooth. When specified, topsoil shall be stockpiled and spread over fills and over areas to facilitate revegetation. The top of the constructed fill shall not be lower at any point than the design elevation, plus an overfill of at least 10 percent for settlement.

Diversion ridges constructed across gullies or depressions shall be compacted by machinery travel or other means sufficient to insure proper functioning of the diversion. The surface of the finished diversion shall be reasonably smooth and present a workmanlike appearance.

Every effort shall be made to protect the diversion outlet. If a vegetated outlet is already

established, heavy equipment movement in the outlet during diversion construction shall be closely controlled.

Compaction Compaction may be accomplished by passage of the excavating equipment. The wheels or tracks of the excavating equipment must pass over 90 percent of the surface of each lift, and compacted to the same density as the adjacent undistributed earth.

UNDERGROUND CONDUITS

If underground conduits are located under diversion ridges, mechanical compaction, water packing, and installation and backfill of conduit trenches shall be made in advance to allow adequate settlement. The materials used for the inlet and conduit shall be suitable for the purpose intended and shall meet the requirements of Subsurface Drains, Specification 606A.

VEGETATIVE COVER

Diversion channels designed for vegetative cover shall be established to grass as soon as practicable after construction. Grass species, planting time and method, and fertilizer application rates shall be as shown on the plans.

CONSTRUCTION OPERATIONS

Construction operations shall be carried out in such a manner and sequence that erosion and air and water pollution are minimized and held within legal limits.

The owner, operator, contractor or other persons will conduct all work and operations in accordance with proper safety codes for the type of construction being performed with due regards to the safety of all persons and property.

SAFETY

Diversion ridges, especially those with steep backslopes, can be very hazardous. For this reason some farmers prefer steep front slopes also, thus keeping machinery away from the steep back slopes. All cut slopes and fills that are to be farmed must be no steeper than that on which farm equipment can operate safely. Any hazards must be brought to the attention of the responsible person.

Landowners or operators, sponsoring organizations, and contractors shall be liable for damage to utilities and damage resulting from disruption of service caused by construction activities. The Natural Resources Conservation Service makes no representation on the existence or non-existence of any utilities. Absence of utilities on the drawings is not assurance that no utilities are present at the site.

It is the responsibility of the landowner or operator to determine if there are buried or overhead utilities in the vicinity of the proposed work. They should take proper procedures to insure that the utilities shall not be jeopardized and that equipment operators and others will not be injured during construction operations.